

This listing of claims will replace all prior versions in the application.

Claims 1-34. (cancelled)

Claim 35. (currently amended) A method for forming a photoresist relief image, comprising:

- a) applying a layer of a positive-acting photoresist composition on a substrate, the photoresist composition comprising a photoactive component and a polymer that is substantially free of aromatic groups and comprises 1) units crosslinked to other polymer units and 2) photoacid-labile acrylate groups, the polymer units being crosslinked by a separate crosslinker component, the crosslinker component being a vinyl ether prior to reaction with the polymer; and
- b) exposing and developing the photoresist layer on the substrate to radiation having a wavelength of about 193 nm and developing the exposed photoresist layer to yield a photoresist relief image; and
- c) chemically etching substrate areas bared of photoresist by development.

Claim 36. (previously presented) The substrate of claim 35 wherein the substrate is a microelectronic wafer.

Claims 37-40. (cancelled)

Claim 41. (previously presented) The method of claim 35 wherein the photoacid-labile groups comprise acrylate esters that comprise a tertiary non-cyclic group or a secondary or tertiary alicyclic group.

Claim 42. (currently amended) The method of claim 35 wherein the photoacid-labile acrylate groups comprise tert-butyl, adamantyl ~~adamantly~~ or norbornyl groups.

Claim 43. (previously presented) The method of claim 26 wherein the polymer is completely free of aromatic groups.

Claims 44-49. (cancelled)

Claim 50. (new) The method of claim 35 wherein the photoacid-labile groups comprise acrylate esters that comprise a secondary or tertiary alicyclic group.

Claim 51. (new) The method of claim 35 wherein the photoacid-labile acrylate groups comprise tert-butyl, adamantyl ~~adamantly~~ or norbornyl groups.

Claim 52. (new) A method for forming a photoresist relief image, comprising:

a) applying a layer of a positive-acting photoresist composition on a substrate, the photoresist composition comprising a photoactive component and a polymer that is substantially free of aromatic groups and comprises 1) units crosslinked to other polymer units and 2) photoacid-labile acrylate groups, the polymer units being crosslinked by a separate crosslinker component; and

b) exposing the photoresist layer on the substrate to radiation having a wavelength of about 193 nm and developing the exposed photoresist layer to yield a photoresist relief image.